USER MANUAL
Vandal Dome Camera

Design and specifications are subject to change without notice.

PRECAUTION

Do use the camera under conditions where temperatures are within -10°C to 45°C.
Be especially careful with ventilation under high temperatures.

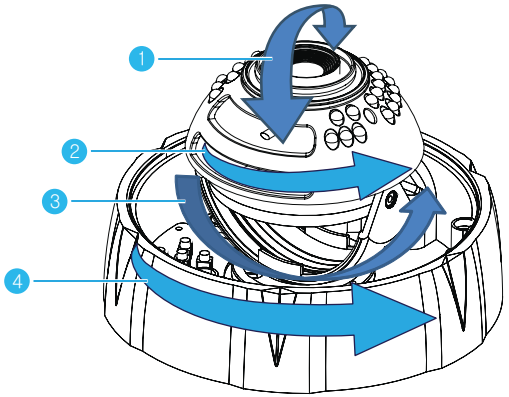
Do not install or use the camera in an environment where the humidity is high.
It can cause the image quality to be poor.

Do not disassemble the camera.
There are no user-serviceable parts inside.

Do not drop the camera or subject them to physical shocks.
It can cause malfunctions to occur.

When this camera is installed near wireless communication devices that emits strong electromagnetic field, irregularity such as noise on the monitor may appear.

Built-in **4-axis** camera bracket will make usemuch easier to rotate in any direction.



COMPOSITION

INSTALLATION

① Place a camera to installation the wall / ceiling.

② Drill three holes according to insert anchors into the drilled holes.

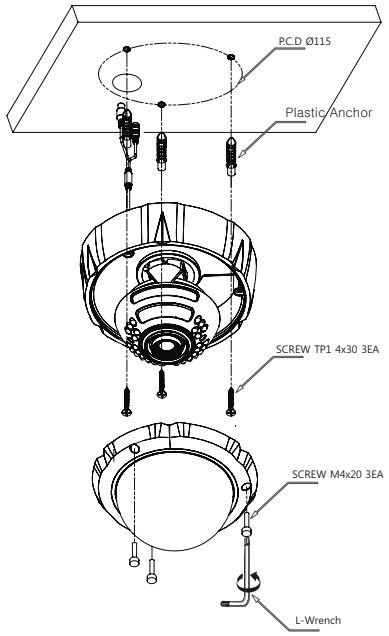
③ Draw out power / video wires to the connecting places.

④ Fix the housing base by screws on the ceiling.

⑤ Adjust desired focus and scene by turning and moving the hemisphere by hand.

⑥ Put the dome cover over the base.

⑦ Fix the dome cover on the base by L-Wrench.



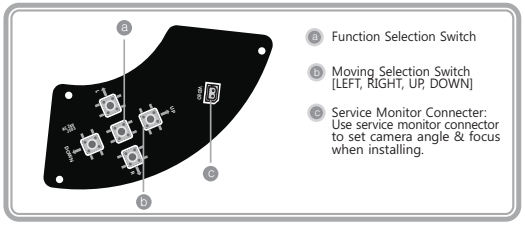
CONNECTION

■ Connecting to Monitor and Power

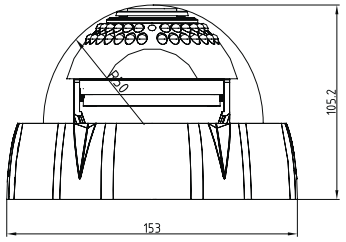
DC(Option: AC Dual) Power Type

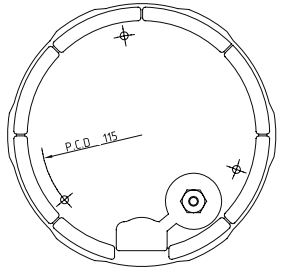
- The wire is polarized.
- Use DC 12V⎓ (Option :AC24V) power source.

No.	Function	Terminal Color	Remark
#1	Video Output	Yellow	1.0 Vp-p
#2	Power Input	B & R	DC12V ±10% (option:AC24V)


a
b
c
Function Selection Switch
Moving Selection Switch [LEFT, RIGHT, UP, DOWN]
Service Monitor Connecter: Use service monitor connector to set camera angle & focus when installing.

DIMENTION





TROUBLESHOOTING:

If you have a trouble operating your camera, refer to the following.
If the guidelines do not enable you to solve the problem, contact an authorized technician.

✔ The image does not appear on the screen.	• Check the power source for the monitor and camera and assure that the voltage and polarity are properly connected and being supplied correctly.
✔ The image on the screen is dim.	• Check if the lens is stained. If dirty, clean the lens with a soft, clean cloth. • Adjust the Back Focus of the lens again.
✔ The camera does not work properly, the surface of the camera case is hot, and a black line appears on the screen.	• Check if you have connected the camera to a proper power source and If there is no problem with the power, turn the unit off immediately and seek assistance from our After Service department.
✔ The screen blinks a lot.	• Check if the camera is pointed toward the sun or a fluorescent lamp. • Adjust the angle or location of the camera if too much light is coming into the screen.

OSD MENU

SETUP MENU	MODE	SUMMARY
LENS	▶DC, MANUAL	DC : Auto iris lens, Manual : Fixed iris lens
SHUTTER	▶AUTO,FLK,FIXED,MANUAL	AUTO : Brightness adjustable(Only for manual mode) FIXED : 1/60(1/50),1/100(1/120),1/250,1/500,1/2,000, 1/5,000,1/10,000,1/100,000sec selectable MANUAL : 1/60(1/50) ~ 1/100,000sec(256steps) FLK : Flickerless
BLC	▶OFF, ON	ON Mode - BLC AREA : 64 areas selectable - BLC RATIO : 64 steps adjustable
AGC	▶ON, OFF	256 Steps adjustable
WHITE BAL.	▶ATW,AWB,FIXED,MANUAL	ATW : One Push AWB : 2,500K ~ 9,500K FIXED : 2,500K ~ 6,500K (Mode1 ~ 4)
FUNCTION	Refer to the bottom(FUNCTION)	
ADJUST	CONTRAST, SHARPNESS CB_GAIN, CR_GAIN	CONTRAST : 256 steps adjustable SHARPNESS : 32 steps adjustable CB_GAIN, CR_GAIN : Don't use(Only for Color camera)
EXIT	Refer to the bottom(FUNCTION)	Save the all setting menu, then exit

OSD MENU

SETUP MENU	MODE	SUMMARY
CAMERA ID	English capital letters, Numeral 0~9, 28 special letters with blank	Maximum length for display is limitted 15 letters Position is selectable
MIRROR	▶OFF, ON	Set a horizontal image inversion
DAY & NIGHT	▶AUTO,COLOR,B/W	ON AUTO Mode - DELAY,START LEVEL,END LEVEL : adjustable - MANUFACTUR VALUE : START 1.5Lux, END 7Lux COLOR : COLOR fixed B/W : B/W fixed - BURST signal is removable on B/W mode
MOTION	▶OFF,ON	ON Mode - 64 area selectable - Push the set button for seconds after areas select - THRESHOLD : Audjust Motion detect sensitivity(256steps) - MOTION TRACE : ON/OFF
PRIVACY	▶OFF,ON	ON Mode : 4 Programable zones(Size,Position,Contrast)
GAMMA	0.05 ~ 1.00 adjustable	Default value is 0.45
LANGUAGE	▶ENGLISH,KOREAN,JAPANESS,CHINESS	Set the language on setup menu
RESET		Return to the fectory mode
RETURN		Save the function menu and return to the SETUP menu

▶ : The mark and bold letters are manufacture value

SPECIFICATION

MODEL	D & N VANDAL DOME [Option : IR / AI / T D N]
Type	Day & Night Vanclal (IR) Dome Camera
Image sensor	1/3" CCD [Sony S U P E R H A D Ⅱ CCD]
Effective pixel	NTSC : 768(H) x 494(V) PIXEL PAL : 752(H) x 582(V) PIXEL
Cell size	NTSC : 6.35㎛(H) x 7.4㎛(V) PAL : 6.5㎛(H) x 6.25㎛(V)
Resolution	HORI. Color 530TV LINE B/W 550TV LINE
TV type	NTSC, PAL
Sync. type	INTERNAL
Scanning system	2:1 Interlace
Scanning Frequancy H.	15.734 KHz(NTSC), 15.625 KHz(PAL)
Scanning Frequancy V.	59.94Hz(NTSC), 50Hz(PAL)
Video out	1.0 Vp-p (Sync. Negative) Termination 75Ω
Gamma characteristic	γ = 0.45 typ.
Min. illumination	35m Range at 0Lux (F/1.2) (Non IR Series : 0.05Lux)
S/N ratio	45dB or More (AGC OFF)
Gain control	Auto
Shutter	1/60 ~ 1/100,000 sec(NTSC), 1/50 ~ 1/100,000 sec(PAL)
Test illumination area	AVERAGE TEST ILLUMINANCE BY FRONT VIEW
Current consumption	DC12V 450mA Max. [Non IR 140mA]
Supplied voltage	DC12V ±10% (Option : AC 24V)
Reverce polarity protection	YES
Lens mount	Verifocal lens (2.8~11mm/3.8~9.5mm/4.0~9.0mm) Option : Fixed lens (3.6mm/6.0mm)
Operation temp.	-10 ~ 50℃
Preservation temp.	-20 ~ 60℃
Dimension	Φ 153mm X 105.2mm
Weight	Approx. 880g

* IR Series : IR Shield Model / Normal Series : Non IR Shield Model
* Board Lens & AI : Varifocal Lens
* Option : Line Lock & AC 24V

NOTE

Changes in this user manual can be made without notice, in order to improve the product quality